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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,202	01/29/2001	Matthew A. Huras	CA9-1999-0047US1/1796P	7317

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EXAMINER

ALAM, SHAHID AL

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/774,202	HURAS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shahid Al Alam	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 19 September 2003.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-59 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1, 18, 30 – 34, 38, 44- 47, 51 and 57-59 is/are rejected.
- 7) Claim(s) 2 – 17, 19 – 29, 35 – 37, 39 – 43, 48 – 50 and 52 – 56 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed on September 19, 2003 have been fully considered but they are not persuasive for the following reasons.
2. Applicants' argue that Beier does not disclose or suggest providing online reorganization which allows scanning, accessing and updating of records during move steps of a reorganization; Beier does not disclose or suggest the moving of data records in a database table to available space in other pages of that database table; Beier does not disclose or suggest vacate and fill clean up steps; and Beier does not show every elements of the claim limitation at the cited location.
3. Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

In Beier reference, a user can be an end user who interacts with the system from an on-line workstation or terminal through an on-line application. Beier allows non-disruptive (i.e., other parts of the system remain unaffected) reorganization, of user data managed by a database management system by using internal indexing, see column 8, line 35 – 41 and column 9, lines 4 – 9.

Beier's teaching of using direct pointers results in a multi-step reorganization process which causes the database to be gone through multiple times before the database is ready to be used after a reorganization. Multiple steps include running a pre-reorganization utility that examines the structures and determines what has to be

done, running a scan utility for data that is not being reorganized but is related to data that is being reorganized, including a reload operation and also running a prefix resolution utility and a prefix update utility. Beier teaches scan utilities that are run on one or more related databases which are being pointed into or from the database being reorganized, see column 3, lines 37 – 60. Beier further teaches that when a database is being reorganized that has alternate, i.e., secondary, indexes associated with a data element being moved, at the time the data element is being moved from the old location to the new location, there is an ability to update all of the indexes, see also column 5, lines 2 – 9.

In response to Applicants' argument that Beier does not disclose claimed limitations in the cited section. Examiner likes to point out that in the "Schering Corp. v. Geneva Pharmaceuticals Inc., 64 USPQ2d 1032 (DC NJ 2002) Decided August 8, 2002." In the above case it is concluded that the prior art disclosure need not be express in order to anticipate. Even if a prior art inventor does not recognize a function of his or her process, the process can anticipate if that function was inherent. To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency is not necessarily coterminous with the knowledge of those of ordinary skill in the art. Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art. However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not

render the old composition patentably new to the discoverer. Insufficient prior understanding of the inherent properties of a known composition does not defeat a finding of anticipation.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111.

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 162 USPQ 541,550-51 (CCPA 1969).

For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 30, 31, 44, 45, 57 and 58 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Number 5,933,820 issued to Harley Beier et al. ("Beier").

With respect to claims 30, 44 and 57, Beier teaches vacate move step to move data records from move pages in the table to available space in the database table (column 5, lines 1 – 6); and

a fill move step to move data records into move pages in the table, wherein the database table can be accessed, scanned, and updated during the vacate move step and fill step of the reorganization (column 5, lines 1 – 6).

As to claims 31, 45 and 58, each move step comprises the step of defining temporary pointers from the original position of each moved record to the moved position of the moved record (column 5, lines 1-6).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 18, 32 – 34, 38, 46, 47, 51 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier.

With respect to claims 1, 34 and 47, Beier teaches moving a subset of records within the database table (column 5, lines 1 – 6); flagging each moved record as a reorganization record (column 6, lines 55 – 60); creating a reorganization pointer record for each moved record at the initial location of the moved record, the reorganization pointer record pointing to the new location of the moved record (abstract).

Beier does not explicitly disclose establishing scanner process constraints based on whether a scanner process is commenced prior to or after the moving, wherein the

scanner process can correctly retrieve records from the database table during the reorganization of the database table, including before and after movement of records in the organization; however, Beier includes using direct pointers result in a multi-step reorganization process . . . a prefix update utility, column 3, lines 37 – 46 and see also column 15, lines 37 – 50).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate a scanner process to Beier teaching in order to improve data availability.

With respect to claims 18, 38 and 51, Beier teaches a vacate move step (column 5, lines 1 – 6); a vacate clean up step (column 1, lines 36 – 39); a fill move step (column 5, lines 2 – 6).

Beier does not explicitly disclose a fill clean up step wherein each clean up step is synchronized to commence at the completion of a move step and to commence only when all queries launching scanner processes commenced before the completion of a move step have completed and each move step is synchronized to commence at the completion of a clean up step and to commence only when all queries launching scanner processes after the completion of a previous move step have completed; however, Beier includes using direct pointers result in a multi-step reorganization process . . . a prefix update utility . . . the work files are combined into a sort. see column 3, lines 37 – 63 and see also column 15, lines 37 – 50).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate a scanner process to Beier teaching in order to improve data availability.

As to claims 32 and 46, Beier teaches all limitations as recited except selected scanners to be constraint; however, Beier includes using direct pointers result in a multi-step reorganization process . . . a prefix update utility, column 3, lines 37 – 46 and see also column 15, lines 37 – 50).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate a scanner process to Beier teaching in order to improve data availability.

As to claim 33, the database table comprises overflow pointer records and the original position of a moved record from which a temporary pointer points (abstract).

The subject matter of claim 59 is rejected in the analysis above in claims 32 and 33.

#### ***Allowable Subject Matter***

6. Claims 2 – 17, 19 – 29, 35 – 37, 39 – 43, 48 – 50 and 52 – 56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid Al Alam whose telephone number is (703) 305-2358. The examiner can normally be reached on Monday - Thursday 8:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Shahid Al Alam  
Primary Examiner  
Art Unit 2172

November 30, 2003